The International Journal of
INDIAN PSYCHOLOGY

Research Paper

Psychologically Studying the Impact of Internet Addiction on the Mental Health of Youth

Dr. Shaista Begum[1]*

ABSTRACT

This research examines the psychological impact of varying levels of internet addiction (low, moderate, severe) on the mental health of youth, specifically focusing on anxiety levels (low, moderate, severe). The study aims to elucidate the correlation between internet addiction and anxiety among boys and girls, contributing to a nuanced understanding of this modern phenomenon. Utilizing a sample of 60 participants (30 boys and 30 girls) aged 13-18, the research employs the Internet Addiction Scale (IAS) and to assess addiction. A one-way ANOVA was conducted to analyse the data, investigating differences in anxiety levels across varying degrees of internet addiction. Results indicate a significant relationship between higher levels of internet addiction and increased anxiety. Boys and girls with severe internet addiction exhibited notably higher anxiety levels compared to those with low or moderate addiction. Additionally, gender differences in anxiety response to internet addiction were observed, with girls showing a greater propensity towards severe anxiety. The findings underscore the critical need for targeted interventions addressing internet addiction to improve mental health outcomes among youth. Recommendations include the implementation of educational programs to raise awareness about the risks of excessive internet use and the development of supportive strategies to manage anxiety in affected individuals. This research enriches the existing literature on internet addiction and mental health, providing valuable insights for mental health professionals, educators, and policymakers. Future studies are suggested to explore longitudinal effects and intervention efficacy to better support youth in the digital age.

Internet is an increasingly essential part of every life today. It is a network that connects several computers and electronic gadgets around the world. Internet provides the ease to access any information and communication with anyone at any time. Internet has become an indispensible part of any life as many of the government schemes too need to be accessed through internet. This has been made possible with the availability of smartphones in several hands today. All the areas have being revolutionized with the use of internet. Education is such a field which has been affected positively with the introduction of internet. It has provided access to education to each and every corner of the earth without the

[1]Lecturer, Ismail National Mahila P.G College, Meerut (UP), India
*Corresponding Author

mandatory need of infrastructure. Children today can study at ease from the comfort of their home from anybody and any topic. It has made education multisensory which makes education more productive. Although internet has many positive effects on education, its addictive nature hurts the progress of the children. Broadly speaking, addiction is defined as a "compulsive, uncontrollable dependence on a substance, habit, or practice to such a degree that cessation causes severe emotional, mental, or physiological reactions (Louis and Paul, 2012). A perusal of the literature revealed various names for Internet addiction, including cyberspace addiction, Internet addiction disorder, online addiction, Net addiction, Internet addicted disorder, pathological Internet use, high Internet dependency, and others (Davis et al.,2002; Hur,2006). Often instead of browsing through relevant pages children end up spending lot of time on social networking sites, online game portals or simply watching unrelated videos on the web. This adversely affects their study habits and ultimately their academic achievement. It is also causing psychological problems among the students as students they like to always glued to the internet hence there social skill are getting diminished. Excess use of internet has adverse effect on the mental health of the students (Shu and Chieh-Ju, 2007). The components of the internet addiction scale were identified after studying the Internet Addiction Scale by Nichols and Nicki (2004), Internet Disorder Scale by Griffith (2005) and Internet Addiction Scale by Tao et al., (2010). The components that are found relevant in the Indian conditions for developing the scale were found to be preoccupation, mood management, external consequences and self-control. The explanation and interpretation of these components, distribution of items in these components is explained in the data analysis section of this report. In this dissertation, my aim is to "psychologically study the impact of internet addiction on the mental health of youth".

Here the question arises, how ones mental health gets impacted due to internet addiction? The answer to this question lies in a simple observation. If we look at our youth now-a-days, we will definitely feel a change in their behaviour, how they perceive things around them, how they react and respond to different situations, how effectively they face their challenges etc. If we go by the literal meaning of internet addiction it says, Internet addiction refers to excessive, compulsive, and problematic use of the internet, leading to negative consequences in various aspects of an individual's life. Excessive internet use can have significant impacts on psychological, social, and even physical well-being. Internet addiction is an umbrella term that refers to the compulsive need to spend a great deal of time on the Internet, to the point where relationships, work and health are allowed to suffer.

Definition of mental health:
Mental health encompasses emotional, psychological, and social well-being, influencing cognition, perception, and behaviour. According to World Health Organization (WHO), it is a "state of well-being in which the individual realizes his or her abilities, can cope with the normal stresses of life, can work productively and fruitfully, and can contribute to his or her community". It likewise determines how an individual handles stress, interpersonal relationships, and decision-making. Mental health includes subjective well-being, perceived self-efficacy, autonomy, competence, intergenerational dependence, and self-actualization of one's intellectual and emotional potential, among others. From the perspectives of positive psychology or holism, mental health may include an individual's ability to enjoy life and to create a balance between life activities and efforts to achieve psychological resilience.

A state of mind characterized by emotional well-being, good behavioural adjustment, relative freedom from anxiety and disabling symptoms, and a capacity to establish constructive relationships and cope with the ordinary demands and stresses of life.

As mentioned above children with internet addiction have less or no amount of emotional regulation. They often forget the importance of active listening, the right way of expressing emotions, dealing with rejections, facing the aftereffects of failure etc. Children have become subsumed in the world of internet. They believe that every solution lies on the internet, which is partially true, because if this was completely true there would be no need of good mental health, better emotional regulation and, wellbeing. The problem is that these children are surrounded by numerous ideas, opinions, solutions, suggestions. It is extremely hard to make the right choice. There is a saying "everything comes at a cost" i.e. If you are spending a lot of unnecessary time on the internet by scrolling reels, the cost will be your precious time, which you could have used in a much better way against scrolling. Internet addiction has been associated with various mental health issues, including depression, anxiety disorders, attention deficit hyperactivity disorder (ADHD), and social phobia. It can also contribute to feelings of isolation and low self-esteem, especially if individuals compare themselves unfavourably to others on social media.

Excessive internet use can lead to a range of negative consequences, including poor academic or work performance, strained relationships with family and friends, neglect of personal hygiene and health, financial problems (such as overspending on online purchases or gambling), and even physical health issues like eye strain, headaches, or sleep disturbances.

The word addiction in itself indicates "a strong physical or psychological need or urge to do something or use something". I would say that internet addiction and poor mental health are positively correlated. A positive correlation means that the variables move in the same direction i.e. if one increases the other also increases and if one decreases the other also decreases. For example, a child named X has a habit of playing online games. He spends a lot of time in playing online games and is greatly subsumed in the gaming world. This habit is impacting his studies, his relationships with peers and family and his own physical health. He does not care about eating food on time, spending time with family and friends, has a poor sleep schedule, does zero physical activity, is becoming aggressive and frustrated day by day etc.

Now if the physical and psychological things are disturbed we can conclude that this child has a poor mental health condition. So here comes the positive correlation concept.

If the internet addiction will keep on increasing, the child's poor mental health condition will also keep increasing. On the other hand, if the child reduces the amount of internet usage and start taking care of his physical and mental health, he will have a decreasing poor mental health condition.

Objectives of This Research
- To provide the overview of the concepts of internet addiction and mental health
- To analyse the psychological impact of internet addiction on mental health
- To explore previous research studies published regarding the research topic.
- To measure the levels of severity of internet addiction
- To provide methods and tools for preparation of the results.
- Giving further discussions and suggestions.

This research will provide a valuable insight into the realm of internet addiction and its psychological impact on the mental health of youngsters.

REVIEW OF LITERATURE

Weiser (2004) "studied that males use the Internet mainly for purposes related to entertainment and leisure, whereas women use it primarily for interpersonal communication and educational assistance. However, additional analyses showed that several gender differences were mediated by differences in age and Internet experience"

Sells SB (1968) "Sound mental health is "satisfaction with oneself, to the satisfaction of others." Personal essentials of productive social interactions in the lack of which a person is likely to be mired in ineffectiveness. Thus, personal, and social competence and lack thereof. These qualities involve the person in an active, productive orientation to his environment; in their lack the person is likely to be at its mercy" Phenomena defining mental illness are in fact manifestations of social ineffectiveness and not sickness in the medical sense". "Mental illness should be a term reserved for conditions described by psychiatric diagnosis"

Young & Rogers (2009) "the study was conducted that 312 surveys were collected with 259 valid profiles from addicted users, which again supported significant levels of depression to be associated with pathological Internet use. This article discussed how a treatment protocol should emphasis the primary psychiatric condition if related to a subsequent impulse control problem such as pathological Internet use. Effective management of psychiatric symptoms may indirectly correct pathological Internet use."

RESEARCH METHODOLOGY

Sample

The sample consists of 60 students (30 boys and 30 girls) from a local high school, aged 13-18. Participants were selected through stratified random sampling to ensure equal gender representation.

Data were collected using standardised instrument "internet addiction scale". The internet addiction scale has 20 items and aims to check the students on the extent of internet addiction that they possess. The scale follows Likert's method of summated rating procedure with: does not apply, rarely, occasionally, frequently, often and always as the options and 0, 1, 2, 3, 4 and 5 as the ratings/scores, respectively. This scale is to be filled by the students.

Table-1

School name	Gender (Boy/Girl)	No. of participants
All Saints School Meerut	Boys	30
Ismail Girls National Inter College Meerut	Girls	30

Tools

Internet Addiction Scale (IAS) constructed and standardised by Mrs Daman Deep Kaur Gulati, Dr Jose J. Kurisunkal and Dr Mamta Bakliwal.

Descriptive statistics provide an overview of the levels of internet addiction and mental health outcomes among the participants. The average IAS score indicates moderate internet addiction, low IAS score indicates normal internet addiction and high scores indicate severe internet addiction along with variations between boys and girls. The components of internet addiction scale has also been described in the interpretation section.

Scoring: The scoring of the Internet Addiction Scale is to be done by adding the score marked by the students in each item. The maximum possible score for the schedule is 100 and the minimum is 0. The sum total of scores obtained by a student for all the 20 items is the internet addiction score of that particular student. The procedure of scoring of the Internet Addiction Scale is given in the following table.

Table-2: Showing Scoring Key of Schedule for Internet Addiction Scale.

Ratings	Score
Does not apply	**0**
Rarely	**1**
Occasionally	**2**
Frequently	**3**
Often	**4**
Always	**5**

The high scores indicate that the students possessed higher level of internet addiction and low score indicate that the students possessed lower level of internet addiction.

Table 3: Shows the Internet Addiction Range Based on The Scores with Obtained from The Research and Their Interpretation

Range	Interpretation
29 and below	**Normal**
30 – 55	**Moderate**
56 and above	**Severe**

Table 4: Distribution of Items

S no.	Components	Question no. Of item	No. Of items
1.	**Preoccupation**	**1, 2, 3, 5, 9**	**5**
2.	**Mood management**	**6, 7, 8, 10, 17**	**5**
3.	**External consequences**	**4, 11, 12, 14, 15**	**5**
4.	**Self-control**	**13, 16, 18, 19, 20**	**5**
Total			**20**

Research variables: In the research study examining the psychological impact of internet addiction on mental health outcomes (specifically anxiety) among 30 boys and 30 girls, the variables can be defined as follows:

Independent variables:
1. **Internet addiction levels**: This variable categorizes participants based on their level of internet addiction, which could be: **Normal, Moderate, Severe**
2. **Gender**: This variable categorizes participants based on their gender: **Boys, Girls**

Dependent variable:
- **ANXIETY LEVELS**: These variable measures the mental health outcome of participants in terms of their anxiety levels, which could be: **Low Anxiety, Moderate Anxiety, Severe Anxiety**
- **Research design:** This quantitative study uses a cross-sectional design to examine the impact of internet addiction on the mental health of 60 students. The study employs **one-way ANOVA** to analyse the data. **The mental health outcome chosen**

for this research is ANXIETY. It has been observed that those who have severe internet addiction experience severe anxiety symptoms, those who have moderate internet addiction experience moderate anxiety and those who have normal/low internet addiction experience normal/low anxiety.

- Thus, low anxiety = low/normal addiction = scores = 29 and below
- Moderate anxiety = moderate addiction = scores = 30 – 55
- Severe anxiety = severe addiction = scores = 56 and above.
- Above conditions are applied to each participant.

DATA ANALYSIS METHODS

Problem statement:

The rapid proliferation of internet use among youth has raised significant concerns about its potential negative impact on mental health. Internet addiction, characterized by excessive or poorly controlled internet use, has been linked to various mental health issues, including anxiety, depression, and stress.

PROBLEM 1: to check the significance difference in the levels of internet addiction (normal, moderate, severe) among the 60 students (boys=30, girls= 30)

HYPOTHESIS 1: There is a significant difference in levels (normal, moderate, severe) of internet addiction among the 60 students (30 boys and 30 girls).

NULL HYPOTHESIS (H0): There is no significant difference in levels (normal, moderate, severe) of internet addiction among the 60 students.

ALTERNATIVE HYPOTHESIS (H1): There is a significant difference in levels (normal, moderate, severe) of internet addiction among the 60 students.

For Problem 1 And Hypothesis 1

Source of variation	Sum of squares	Degrees of freedom	Mean squares	F (0.01)
Between	Ssb = 6040.93	Dfbetween =k−1 =6−1 =5	Msb = ssb/df(between) = 6040.93/5 = 1208.19	F=msb/msw=1208.19/38.04 = 31.76
Within	Ssw = 2054.42	Dfwithin=n−k =60−6 =54	Msw =ssw/df(within) = 2054.42/54 = 38.04	

Using an F-distribution table with df between = 5 and df within = 54 at α = 0.01, the critical value F critical≈ 3.34.

Since F= 31.76 > Fcritical = 3.34, we reject the null hypothesis.

There is a significant difference in levels (normal, moderate, severe) of internet addiction among the 60 students at the 0.01 significance level. Therefore, we reject the null hypothesis (H0) and accept the alternative hypothesis (H1).

NOTE: Using an F-distribution table with df between = 5 and df within = 54 at α=0.05, the critical value Fcritical≈2.37

Since F= 31.76>Fcritical=2.37, we reject the null hypothesis. There is a significant difference in levels (normal, moderate, severe) of internet addiction among the 60 students at the 0.05 significance level. Therefore, we reject the null hypothesis (H0) and accept the alternative hypothesis (H1).

Thus, at both significance levels 0.01 and 0.05 we reject the null hypothesis and accept the alternate hypothesis.

PROBLEM 2: to check if the internet addiction significantly impacts the mental health outcome (low, moderate, severe anxiety) of the students

HYPOTHESIS 2: Internet addiction significantly impacts the mental health outcome (low, moderate, severe anxiety) of the students.

NULL HYPOTHESIS (H0): Internet addiction does not significantly impact the mental health outcome (low, moderate, severe anxiety) of the students.

ALTERNATIVE HYPOTHESIS (H2): Internet addiction significantly impacts the mental health outcome (low, moderate, severe anxiety) of the students.

DESCRIPTIVE STATISTICS: ONE-WAY ANOVA RESULTS
For Problem 2 And Hypothesis 2

Source of variation	Sum of squares	Degrees of freedom	Mean squares	F (0.01)
Between	**Ssb = 6040.93**	**Dfbetween =k−1 =3−1 =2**	**Msb =ssb/df(between) =6040.93/2 = 3020.47**	**F = msb/msw = 3020.47/36.04 = 83.81**
Within	**Ssw= 2054.42**	**Dfwithin =n−k =60−3 =57**	**Msw =ssw/df(within) =2054.42/57 = 36.04**	

Using an F-distribution table with df between=2 and df within =57 at α=0.01, the critical value F critical ≈ 4.98.

Since F= 83.81 >Fcritical ≈ 4.98, we reject the null hypothesis.

There is a significant difference in levels (normal, moderate, severe) of internet addiction among the 60 students at the 0.01 significance level. Therefore, we reject the null hypothesis (H0) and accept the alternative hypothesis (H2): Internet addiction significantly impacts the mental health outcome (low, moderate, severe anxiety) of the students.

NOTE: Using an F-distribution table with df between = 2 and df within = 57 at α=0.05, the critical value Fcritical≈ 3.15

Since F= 83.81 >Fcritical ≈ 3.15, we reject the null hypothesis.

There is a significant difference in levels (normal, moderate, severe) of internet addiction among the 60 students at the 0.05 significance level. Therefore, we reject the null hypothesis (H0) and accept the alternative hypothesis (H2): Internet addiction significantly impacts the mental health outcome (low, moderate, severe anxiety) of the students.

Thus, at both significance levels 0.01 and 0.05 we reject the null hypothesis and accept the alternate hypothesis.

PROBLEM 3: to check if there is significant gender differences (boys and girls) in the impact of internet addiction on the mental health outcome (low, moderate, severe anxiety) among the students.

HYPOTHESIS 3: There are significant gender differences (boys and girls) in the impact of internet addiction on mental health outcome (low, moderate, severe anxiety) among the students.

NULL HYPOTHESIS (H0): There are no significant gender differences (boys and girls) in the impact of internet addiction on mental health outcome (low, moderate, severe anxiety) among the students.

ALTERNATIVE HYPOTHESIS (H3): There are significant gender differences (boys and girls) in the impact of internet addiction on mental health outcome (low, moderate, severe anxiety) among the students.

For Problem 3 And Hypothesis 3

Source of variation	Sum of squares	Degrees of freedom	Mean squares	F (0.01)
Between	**Ssb = 6040.93**	**Dfbetween =k−1 =6−1 =5**	**Msb =ssb/df(between) =6040.93/5 = 1208.19**	**F = msb/msw =1208.19/ 38.04 = 31.76**
Within	**Ssw= 2054.42**	**Dfwithin =n−k =60−6 =54**	**Msw =ssw/df(within) =2054.42/54 = 38.04**	

Using an F-distribution table with df between =5 and dfwithin =54 at α=0.01, the critical value F critical≈ 3.34.

Since F= 31.76>Fcritical ≈ 3.34, we reject the null hypothesis.

There are significant gender differences in the impact of internet addiction on mental health outcomes (low, moderate, severe anxiety) among the students at the 0.01 significance level. Therefore, we reject the null hypothesis (H0) and accept the alternative hypothesis (H3): There are significant gender differences in the impact of internet addiction on mental health outcomes among the students.

NOTE: Using an F-distribution table with df between = 5 and df within = 54 at α=0.05, the critical value Fcritical≈2.37

Since F= 31.76 >Fcritical ≈ 2.37, we reject the null hypothesis.

There are significant gender differences in the impact of internet addiction on mental health outcomes (low, moderate, severe anxiety) among the students at the 0.05 significance level. Therefore, we reject the null hypothesis (H0) and accept the alternative hypothesis (H1): There are significant gender differences in the impact of internet addiction on mental health outcomes among the students.

Thus, at both significance levels 0.01 and 0.05 we reject the null hypothesis and accept the alternate hypothesis.

Interpretation of findings
1. From hypothesis 1 it can be concluded that there is a distinction between the three levels of internet addiction i.e. normal, moderate and severe and all the participants. Each participant has his/her own opinion and thoughts regarding usage of internet and this is the reason why we are seeing such differences among all the students and between the various levels of internet addiction.
2. From hypothesis 2 it can be seen that internet addiction impacts the mental health of the youth. For this research purpose I have taken "anxiety" as the mental health outcome of internet addiction. Although there are many other effects of internet addiction as well, but for this research purpose "anxiety" is used as one of the effects of internet addiction. It can be seen that those who have scored high or moderate on internet addiction scale have severe and moderate levels of anxiety.
3. From hypothesis 3 it is concluded that gender differences also play a major role in the usage of internet. Boys and girls both have a different temperament and natural tendency towards different scenarios in their lives. Boys are seen to be more aggressive than girls and boys show greater withdrawal symptoms as compared to girls. Though, the above data is not sufficient to generalise the behaviour of girls and boys but through their scores one can conclude that boys have greater or higher scores than girls on the internet addiction scale.
4. The findings suggest that higher levels of internet addiction are associated with increased anxiety. Both boys and girls show higher rates of anxiety when they are withdrawn or forced to stop the use of internet, thus resulting in internet addiction.
5. The individual scores of boys and girls also show that those who have high scores tend to get disturbed with preoccupation as these adolescents face issues in their daily life by being obsessed towards using internet.
6. In this study it is revealed that those adolescents with high scores face difficulty in managing their mood in a way that they are unable to think about anything else except using internet and gluing to their devices. Such youth usually act inappropriately with their family members.
7. Due to continuous usage of the internet on their respective devices, these adolescents face a backlash from their immediate family as family wants to lessen the usage of the internet and spend time for other important activities specially academics of their children. Thus, external consequences i.e. reaction of the people related to the individual as a result of the demeanor of the individual, is quite evident from high scorers of the internet addiction scale participants.

8. The participants who score moderate and high scores on the internet addiction scale lacked self-control. It can be seen in their responses that they are unable to regulate their emotions, thoughts and behaviours whenever they face adverse situations.

CONCLUSION

This research covers the area of internet addiction and its impact on the mental health of adolescents. The main purpose of this research was to check if internet addiction has an impact on the mental health of youth or not, if it has an impact then what are the psychological or mental health outcomes on the youth.We have also checked the gender differences which exist in the behaviour of internet addiction. From Review of literature we can conclude that internet addiction affects the people in various ways such as they face anxiety, depression, stress, social maladjustment, misconduct, severe withdrawal symptoms and so forth. Studies also show that there has been significant impact on the academics of these children because they spend so much time on using the internet and because of that lesser time is spent on studies. In this research, I have taken one mental health or psychological outcome i.e. anxiety due to the addiction of using internet.

My findings are as follows:
1. There is a gender difference in usage and addiction of the internet. Boys and girls differ in their approaches towards internet usage.
2. Internet addiction adversely impacts psychological/mental health outcome.
3. There is a relationship between levels of internet addiction and every participant as the scores of all the participants differ.
4. Adolescents scoring highly on the internet addiction scale seem to be obsessed towards the use of internet.
5. High internet usage leads to lower ability to manage mood and handle feelings among each participant.
6. The actions i.e. usage of internet of each participant plays a major role in defining his/her external consequences in which mainly family suffers because of their child.
7. The youth loses self-control due to excessive usage of the internet
8. This research provides a short review of how internet has been used mindlessly by the adolescents and how they get adversely impacted due to its high usage

Recommendation
Recommendations include implementing digital literacy programs, providing gender-sensitive mental health support, and conducting further research on the long-term effects of internet addiction.

Final Thoughts
Understanding the psychological impact of internet addiction is crucial for promoting the well-being of youth. Collaborative efforts between educators, mental health professionals, and policymakers are essential to address this growing concern.

Future Research:
The research on the relationship of mental health and internet addiction must be keep continuing for the better understanding of the general public.

REFERENCES

About Mental Health. www.cdc.gov.2021-11-23. Retrieved 2022.04.11.

American Psychological Association. (2018). APA Dictionary of Psychology. Dictionary. apa.org; American Psychological Association. https://dictionary.apa.org/mental-health

Gangwar, G., & Suvidha. (n.d.). IJSRST162539 | A Systematic Review of Literature on Effect of Internet Addiction in Adolescents. Retrieved September 30, 2024, from https://ijsrst.com/paper/592.pdf

Gulati Daman Deep Kaur, Kurisunkal Dr. Jose J., Bakliwal Dr. Mamta Manual for Internet Addiction Scale Published by Agra Psychological Research CELL.

Gulati Daman Deep Kaur, Kurisunkal Dr. Jose J., Bakliwal Dr. Mamta Manual for Internet Addiction Scale Published by Agra Psychological Research CELL.

Health and Well-Being. World Health Organization. Retrieved 2023-08-09.

J. John-Langba, M. Matsela, & V. N. John-Langba3. (2022). A Review Study of the Concept of Mental Health. Human Ecology, 79(3), 1–12. https://doi.org/10.31901/24566608.2022/79.1-3.3340

Shaw, M., & Black, D. W. (2008). Internet Addiction: Definition, Assessment, Epidemiology and Clinical Management. CNS Drugs, 22(5), 353–365. https://doi.org/10.2165/00023210-200822050-00001

Snyder CR, Lopez SJ, Pendrotti JT (2011). Positive psychology: the scientific and practical explorations of human strengths. SAGE. ISBN 978-1-4129-8195-8.

The world health report 2001- Mental Health: New Understanding, New Hope" (PDF). WHO.